KENWOOD

DUAL DIN SIZED CD RECEIVER
DPX502
INSTRUCTION MANUAL

Kenwood Corporation

SAT RADIO READY **HD Radio® READY** **Designed for Windows Media™** **AAC** **Made for iPod**

Take the time to read through this instruction manual.
Familiarity with installation and operation procedures will help you obtain the best performance from your new CD-receiver.
For your records
Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your Kenwood dealer for information or service on the product.
Model DPX502 Serial number _____

US Residence Only

Register Online

Register your Kenwood product at
www.kenwoodusa.com

Contents

Safety precautions

⚠WARNING

To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- Mounting and wiring this product requires skills and experience. For safety's sake, leave the mounting and wiring work to professionals.

⚠CAUTION

To prevent damage to the machine, take the following precautions:

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- When replacing a fuse, only use a new fuse with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- Use only the screws provided or specified for installation. If you use wrong screws, you could damage the unit.

Do Not Load 3-in. CDs in the CD slot

If you try to load a 3 in. CD with its adapter into the unit, the adapter might separate from the CD and damage the unit.

About CD players/disc changers connected to this unit

Kenwood disc changers/ CD players released in 1998 or later can be connected to this unit.
Refer to the catalog or consult your Kenwood dealer for connectable models of disc changers/ CD players. Note that any Kenwood disc changers/ CD players released in 1997 or earlier and disc changers made by other makers cannot be connected to this unit.
Connecting unsupported disc changers/CD players to this unit may result in damage.
Set the "O-N" Switch to the "N" position for the applicable Kenwood disc changers/ CD players.
The functions you can use and the information that can be displayed may differ depending on the models being connected.

⚠
- You can damage both your unit and the CD changer if you connect them incorrectly.

Lens Fogging

When you turn on the car heater in cold weather, dew or condensation may form on the lens in the CD player of the unit. Called lens fogging, this condensation on the lens may not allow CDs to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.

Notes

- If you experience problems during installation, consult your Kenwood dealer.
- When you purchase optional accessories, check with your Kenwood dealer to make sure that they work with your model and in your area.
- We recommend the use of <Activating Security Code> (page 24) to prevent theft.
- The RDS feature won't work where the service is not supported by any broadcasting station.
- The characters which can be displayed by this unit are A-Z 0-9 @ " ' ` % & * + − = , . / \ < > [ ] ( ) : ; ^ - { } | ~ .
- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may be inapplicable.

How to reset your unit
- If the unit fails to operate properly, press the Reset button. The unit returns to factory settings when the Reset button is pressed.
- Remove the USB device before pressing the Reset button. Pressing the Reset button with the USB device installed can damage the data contained in the USB device. For how to remove the USB device, refer to <Playing USB (iPod) device> (page 17).
- Press the reset button if the disc auto changer fails to operate correctly. Normal operation should be restored.

Reset button
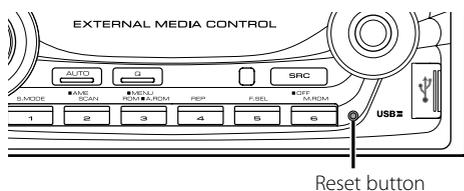
Cleaning the Unit
If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth.
If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.

⚠

- Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases characters.

Before using this unit for the first time
This unit is initially set on the Demonstration mode. When using this unit for the first time, cancel the <Demonstration mode Setting> (page 29).

About KENWOOD "Music Editor" of PC application attached to DPX502
- "Music Editor" is recorded in the CD-ROM attached to this unit.
- Refer to the attached installation manual for the installation method of "Music Editor".
- Refer to the user's manual recorded in the installation CD-ROM and Help of "Music Editor" for the operation method of "Music Editor".
- The unit can play CD/ USB device created by "Music Editor".
- Information about "Music Editor" upgrade is put on the site, **www.kenwood.com**.

About Audio file
- **Playable Audio file**

  AAC-LC (.m4a), MP3 (.mp3), WMA (.wma), WAV (.wav)
- **Playable disc media**

  CD-R/RW/ROM
- **Playable disc file format**

  ISO 9660 Level 1/2, Joliet, Romeo, Long file name.
- **Playable USB device**

 USB mass storage class, iPod with KCA-iP200
- **Playable USB device file system**

  FAT16, FAT32

Although the audio files are complied with the standards listed above, the play maybe impossible depending on the types or conditions of media or device.

- **Playing order of the Audio file**

  In the example of folder/file tree shown below, the files are played in the order from ① to ⑩.
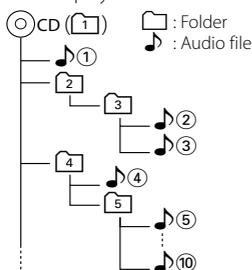
An online manual about audio files is put on the site, **www.kenwood.com/audiofile/**. On this online manual, detailed information and notes which are not written in this manual are provided. Make sure to read through the online manual as well.

- In this manual, the word "USB device" is used for flash memories and digital audio players which have USB terminals.
- The word "iPod" appearing in this manual indicates the iPod connected with the KCA-iP200 (optional accessory). The iPod connected with the KCA-iP200 can be controlled from this unit. iPods that can be connected with the KCA-iP200 are the iPod nano and the iPod with video. When an iPod is connected using a commercially available USB cable, it is handled as a mass-storage-class device.
- For the supported formats and types of USB device, refer to **www.kenwood.com/usb/**.

About USB device
- Install the USB device in the place where it will not prevent you from driving your vehicle properly.
- You cannot connect a USB device via a USB hub.
- Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device.
  We shall have no compensation for any damage arising out of erasure of the stored data.
- No USB device comes with this unit. You need to purchase a commercially available USB device.
- Do not directly connect the USB device to the USB connector on the panel. Connect it using a cable.
- Leave the cap on when not using an USB device.
- For how to play the audio files recorded in a USB device, see <CD/USB device/Audio file/External disc control features> (page 16).
- When connecting the USB device, usage of the CA-U1EX (option) is recommended.
  Normal playback is not guaranteed when a cable other than the USB compatible cable is used.
  Connecting a cable whose total length is longer than 5 m can result in abnormal playback.

About Satellite Radio tuner
This unit supports Satellite Radio tuners which are released by SIRIUS and XM.

Refer to the instruction manual of Satellite radio tuner.

Notes

Handling CDs
- Do not touch the recording surface of the CD.
- Do not stick tape etc. on the CD, or use a CD with tape stuck on it.
- Do not use disc type accessories.
- Clean from the center of the disc and move outward.
- When removing CDs from this unit, pull them out horizontally.
- If the CD center hole or outside rim has burrs, use the CD only after removing the burrs with a ballpoint pen etc.

CDs that cannot be used
- CDs that are not round cannot be used.
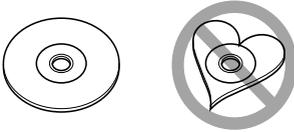
- CDs with coloring on the recording surface or CDs that are dirty cannot be used.
- This unit can only play the CDs with
  This unit may not correctly play discs which do not have the mark.
- You cannot play a CD-R or CD-RW that has not been finalized. (For the finalization process refer to your CD-R/CD-RW writing software, and your CD-R/CD-RW recorder instruction manual.)

⚠CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

Kenwood Corporation
2967-3, ISHIKAWA-MACHI,
HACHIOJI-SHI
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT CONFORMS TO DHHS REGULATIONS N0.21 CFR 1040. 10, CHAPTER 1, SUBCHAPTER J.

Location : Bottom Panel

FCC WARNING
This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

General features

DISP

Auxiliary input

Control knob

VOL

ATT

Q   SRC

Clock display

LOUD indicator   **ATT indicator**
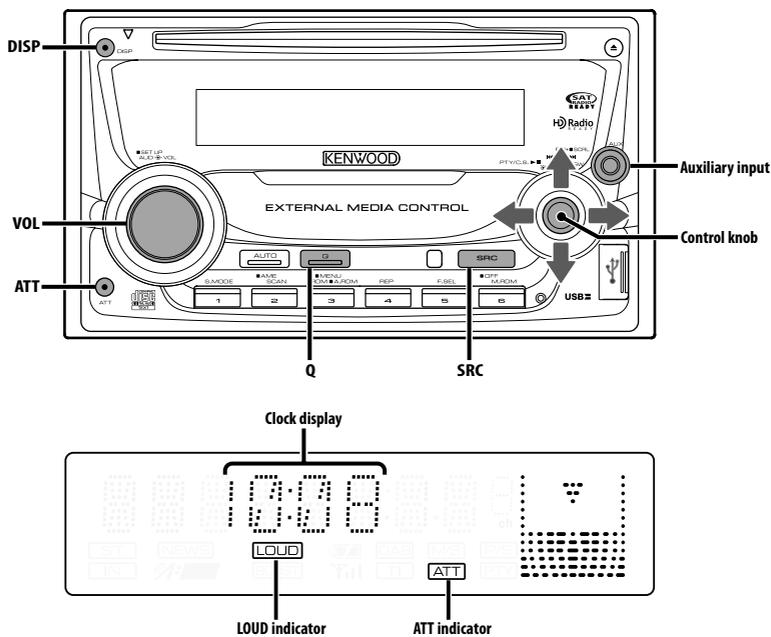
Power

Turning ON the Power
Press the [SRC] button.

Turning OFF the Power
Press the [SRC] button for at least 1 second.

Selecting the Source

Press the [SRC] button.

Source required	Display
Satellite radio (Optional accessory)	"SAT"
Tuner or HD Radio (Optional accessory)	"TUNER" or "HD RADIO"
USB device (iPod)	"USB" ("iPod")
CD	"CD"
External disc (Optional accessory)	"CD CH"
Auxiliary input*	"AUX"
Auxiliary input (Optional accessory)	"AUX EXT"
Standby (Illumination only mode)	"STANDBY"

* An equipment such as a portable audio player can
  be connected to the auxiliary input terminal using a
  commercially available mini-plug (3.5ø).

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- When connection of the iPod is recognized, the source
  display changes from "USB" to "iPod".
- USB (iPod) source is recognized as CD source on the
  connected unit.
- Use the mini-plug which is stereo type and does not
  have any resistance.

Volume

Increasing Volume
Turn the [VOL] knob clockwise.

Decreasing Volume
Turn the [VOL] knob counterclockwise.

General features

Attenuator

Turning the volume down quickly.

Press the [ATT] button.
Each time you press the button, the Attenuator turns ON and OFF.
When the Attenuator is ON, the "ATT" indicator blinks.

System Q

Selecting the best sound setting preset for different types of music.

1 Select the source to set
Press the [SRC] button.

2 Select the Sound type
Press the [Q] button.
When you press the button once, the current sound setting is displayed.
Each time you press the button, the sound setting alternates.

Sound setting	Display
User memory	"USER"
Rock	"ROCK"
Pops	"POPS"
Easy	"EASY"
Top 40	"TOP40"
Jazz	"JAZZ"
Natural	"NATURAL"

• User memory: The values set on the <Audio Control> (page 8).
• Change each setting value with the <Speaker Setting> (page 9).
  First, select the speaker type with the Speaker setting.

Audio Control

1 Select the source to adjust
Press the [SRC] button.

2 Enter Audio Control mode
Press the [VOL] knob.

3 Select the Basic Audio item to adjust
Press the [VOL] knob.
Each time you press the knob, the item to be adjusted alternates between the items shown in the table below.

4 Adjust the Basic Audio item
Turn the [VOL] knob.

Adjustment Item	Display	Range
Rear Volume	"R-VOL"	0 — 35
Subwoofer level	"SW L"	−15 — +15
Bass level*	"BAS L"	−8 — +8
Middle level*	"MID L"	−8 — +8
Treble level*	"TRE L"	−8 — +8
Balance	"BAL"	Left 15 — Right 15
Fader	"FAD"	Rear 15 — Front 15
Exit Audio Control mode (Volume control mode)		

* Source tone memory: Puts the set up value in the memory per source.

5 Exit Audio Control mode
Press any button.
Press a button other than the [VOL] knob and [ATT] button.

Audio Setup

Setting the Sound system, such as Cross over Network.

1 Select the source to adjust
Press the [SRC] button.

2 Enter Audio Setup mode
Press the [VOL] knob for at least 1 second.

3 Select the Audio Setup item to adjust
Press the [VOL] knob.
Each time you press the knob, the item to be adjusted alternates between the items shown in the table below.

4 Setup the Audio item
Turn the [VOL] knob.

Adjustment Item	Display	Range
Front High Pass Filter	"HPF"	Through/40/60/80/100/120/150/180/220 Hz
Rear High Pass Filter	"HPR"	Through/40/60/80/100/120/150/180/220 Hz
Low Pass Filter	"LPF"	50/60/80/100/120/Through Hz
Subwoofer Phase	"PHAS"	Reverse (180º)/ Normal (0º)
Volume offset	"V-OFF"	−8 — ±0 (AUX: -8— +8)
Loudness	"LOUD"	OFF/ON
Dual Zone System	"2ZON"	OFF/ON

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• Volume offset: Sets each source's volume as a difference from the basic volume.
• Loudness: Compensates for low and high tones during low volume. (Only the low tone is compensated for when the tuner is selected as a source.)
• Dual Zone System
  Main source and sub source (Auxiliary input) output Front channel and Rear channel separately.
  - Set up the channel of sub source by <Dual Zone System Setting> (page 26).
  - Select Main source by [SRC] button.
  - Adjust the volume of Front channel by [VOL] knob.
  - Adjust the volume of Rear channel by <Audio Control> (page 8).
  - The Audio Control has no effect on sub source.
• You can use the Dual Zone System with the internal auxiliary input.

5 Exit Audio Setup mode
Press the [VOL] knob for at least 1 second.

Speaker Setting

Fine-tuning so that the System Q value is optimal when setting the speaker type.

1 Enter Standby
Press the [SRC] button.
Select the "STANDBY" display.

2 Enter Speaker Setting mode
Press the [VOL] knob.

3 Select the Speaker type
Turn the [VOL] knob.
Each time you turn the knob, the setting alternates between the settings shown in the table below.

Speaker type	Display
OFF	"SP OFF"
For 5 & 4 in. speaker	"SP 5/4"
For 6 & 6x9 in. speaker	"SP 6*9/6"
For the OEM speaker	"SP OEM"

4 Exit Speaker Setting mode
Press the [VOL] knob.

Subwoofer Output

Turning the Subwoofer output ON or OFF.

Push the Control knob toward down for at least 2 seconds.
Each time you push the knob, Subwoofer output switches ON and OFF.
When it is ON, "SW ON" is displayed.

TEL Mute

The audio system automatically mutes when a call comes in.

When a call comes in
"CALL" is displayed.
The audio system pauses.

Listening to the audio during a call
Press the [SRC] button.
The "CALL" display disappears and the audio system comes back ON.

When the call ends
Hang up the phone.
The "CALL" display disappears and the audio system comes back ON.

⊜

• To use the TEL Mute feature, you need to hook up the MUTE wire to your telephone using a commercial telephone accessory. Refer to <Connecting Wires to Terminals> (page 33).

Switching Display

Changing the information displayed.

Press the [DISP] button.
Each time the button is pressed the display switches as shown below.

In Tuner source

Information	Display
Program Service name or Frequency (FM)	"FREQ/PS"
Radio text, Program Service name or Frequency (FM)	"R-TEXT"
Frequency (AM)	"FREQ"
Clock	"CLOCK"

In CD & External disc source

Information	Display
Disc title	"D-TITLE"
Track title	"T-TITLE"
Track number & Play time	"P-TIME"
Clock	"CLOCK"

In Audio file source

Information	Display
Music title & Artist name	"TITLE"
Album name & Artist name	"ALBUM"
Folder name*	"FOLDER"
File name	"FILE"
Play time & Music number	"P-TIME"
Clock	"CLOCK"

In HD Radio source

Information	Display
Station name	"ST NAME"
Music title/ Artist name/ Album name/ Genre	"TITLE"
Frequency	"FREQ"
Clock	"CLOCK"

In Satellite radio source

Information	Display
Channel name	"CH NAME"
Music title	"SONG"
Artist name	"ARTIST"
Composer name	"COMPOSER"
Category name	"CATEGORY"
Label name	"LABEL"
Comment	"COMMENT"
Band & Channel number	"CH NUM"
Clock	"CLOCK"

In Standby/ Auxiliary input source

Information	Display
Source name	"SRC NAME"
Clock	"CLOCK"

⊜

- When the music number exceeds 1000, only the last 3 digits of its number are displayed.
- When you select the clock display, the display setting of each source will be changed to the clock display.
- Music title, Artist name, and Album name cannot be displayed in WAV file.
- If the selected display item does not have any information, alternative information is displayed.
- * When playing music from iPod or music edited by "Music Editor", the folder name display may show something different such as playlist or artist name depending on the music selection procedure.

Tuner features

AUTO/AME

Control knob

SRC

1 - 6

Band display   Frequency display

ST indicator   Preset station number
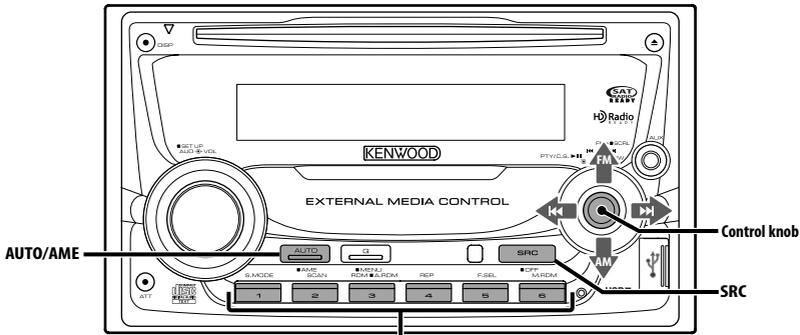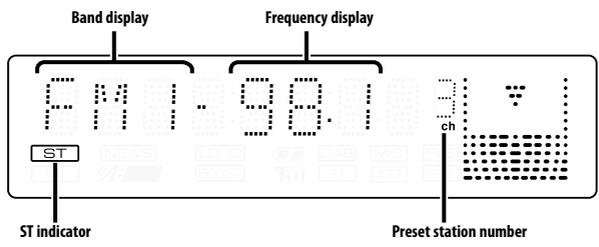
Tuning

Selecting the station.

1 Select tuner source
Press the [SRC] button.
Select the "TUNER" display.

2 Select the band
Push the Control knob towards [FM] or [AM].
Each time you push the knob toward [FM], it
switches between the FM1, FM2, and FM3 bands.

3 Tune up or down band
Push the Control knob towards [I◄◄] or [►►I].

⏛

• During reception of stereo stations the "ST" indicator is
ON.

Tuning Mode

Choose the tuning mode.

Press the [AUTO] button.
Each time you press the button, the Tuning mode
alternates between the modes shown in the table
below.

Tuning mode	Display	Operation
Auto seek	"AUTO 1"	Automatic search for a station.
Preset station seek	"AUTO 2"	Search in order of the stations in the Preset memory.
Manual	"MANUAL"	Normal manual tuning control.

Direct Access Tuning

Entering the frequency and tuning.

1 Select the band
Press the [FM] or [AM] button.

2 Enter Direct Access Tuning mode
Press the [DIRECT] button on the remote control.
"– – – –" is displayed.

3 Enter the frequency
Press the number buttons on the remote control.
Example:

Desired frequency	Press button
92.1 MHz (FM)	[0], [9], [2], [1]
810 kHz (AM)	[0], [8], [1], [0]

Cancelling Direct Access Tuning
Press the [DIRECT] button on the remote control.

Station Preset Memory

Putting a station in the memory.

1 Select the band
Push the Control knob towards [FM] or [AM].

2 Select the frequency to put in the memory
Push the Control knob towards [I◄◄] or [►►I].

3 Put the frequency in the memory
Press the desired [1] — [6] button for at least 2 seconds.
The preset number display blinks 1 time.
On each band, 1 station can be put in the memory on each [1] — [6] button.

Auto Memory Entry

Putting stations with good reception in the memory automatically.

1 Select the band for Auto Memory Entry
Push the Control knob towards [FM] or [AM].

2 Open Auto Memory Entry
Press the [AME] button for at least 2 seconds.
"A-MEMORY" is displayed.
When 6 stations that can be received are put in the memory Auto Memory Entry closes.

Preset Tuning

Recalling the stations in the memory.

1 Select the band
Push the Control knob towards [FM] or [AM].

2 Recall the station
Press the desired [1] — [6] button.

AUTO

Control knob

1 - 6

Radio text

RDS indicator   TI indicator   PTY indicator
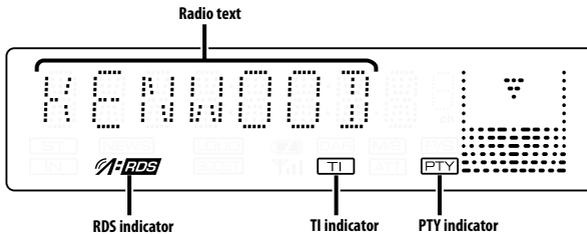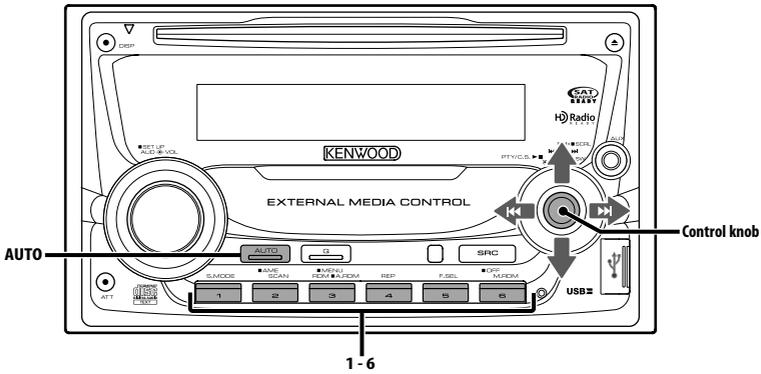
Radio Text Scroll

Scrolling the displayed radio text.

Push the Control knob toward up for at least 2 seconds.

⤷
• When the <Display Illumination Control> (page 25) is set to OFF, the display may black out while scrolling.

PTY (Program Type)

Selecting the Program Type and searching for a station.

1 Enter PTY mode
Press the Control knob.
During PTY mode the "PTY" indicator is ON.

⤷
• The PTY function cannot be used during a traffic bulletin or AM reception.

2 Select the Program Type
Push the Control knob towards up or down.

No.	Program Type	Display
1.	Speech	"SPEECH"
2.	Music	"MUSIC"
3.	News	"NEWS"
4.	Information	"INFORM"
5.	Sports	"SPORTS"
6.	Talk	"TALK"
7.	Rock	"ROCK"
8.	Classic Rock	"CLS ROCK"
9.	Adult Hits	"ADLT HIT"
10.	Soft Rock	"SOFT RCK"
11.	Top 40	"TOP 40"
12.	Country	"COUNTRY"
13.	Oldies	"OLDIES"
14.	Soft	"SOFT"
15.	Nostalgia	"NOSTALGA"
16.	Jazz	"JAZZ"
17.	Classical	"CLASSICL"
18.	R & B	"R & B"
19.	Soft R & B	"SOFT R&B"
20.	Language	"LANGUAGE"

21.	Religious Music	"REL MUSC"
22.	Religious Talk	"REL TALK"
23.	Personality	"PERSNLTY"
24.	Public	"PUBLIC"
25.	College	"COLLEGE"
26.	Weather	"WEATHER"

⌨

- Speech and Music include the Program type below.
  Music: No.7 — 19, 21
  Speech: No.3 — 6, 20, 22 — 26
- The Program Type can be put in the [1] — [6] button memory and recalled quickly. Refer to the <Program Type preset> (page 15).
- The Program Type can be put in the preset memory and recalled quickly. Refer to the <Program Type preset> (page 15).

3 Search for the selected Program Type station
Push the Control knob towards [I◄◄] or [►►I].
When you want to search for other stations, push toward [I◄◄] or [►►I] of the Control knob again.

⌨

- When selected Program Type is not found, "NO PTY" is displayed. Select another Program Type.

4 Exit PTY mode
Press the Control knob.

Registration of a station as a PTY

Registering a Program Type for stations with no PTY data.

1 Receive the station you want to register

2 Select the Program Type to register
Refer to <PTY (Program Type)> (page 14).

3 Register the Program Type
Press the [AUTO] button for at least 2 seconds.

Confirming the Program Type
Press the [AUTO] button.
The Program Type is displayed for 5 seconds.

4 Exit PTY mode
Press the Control knob.

Program Type preset

Putting the Program Type in the Preset button memory and quick recall.

Presetting the Program Type

1 Select the Program Type to preset
Refer to <PTY (Program Type)> (page 14).

2 Preset the Program Type
Press the desired [1] — [6] button for at least 2 seconds.

Recalling the preset Program Type

1 Enter PTY mode
Refer to <PTY (Program Type)> (page 14).

2 Recall the Program Type
Press the desired [1] — [6] button.

CD/USB device/Audio file/External disc control features

Control knob

USB connector

SRC

S.MODE SCAN RDM/3/ REP F.SEL M.RDM
              A.RDM

Track number   Play time

IN indicator   Disc number
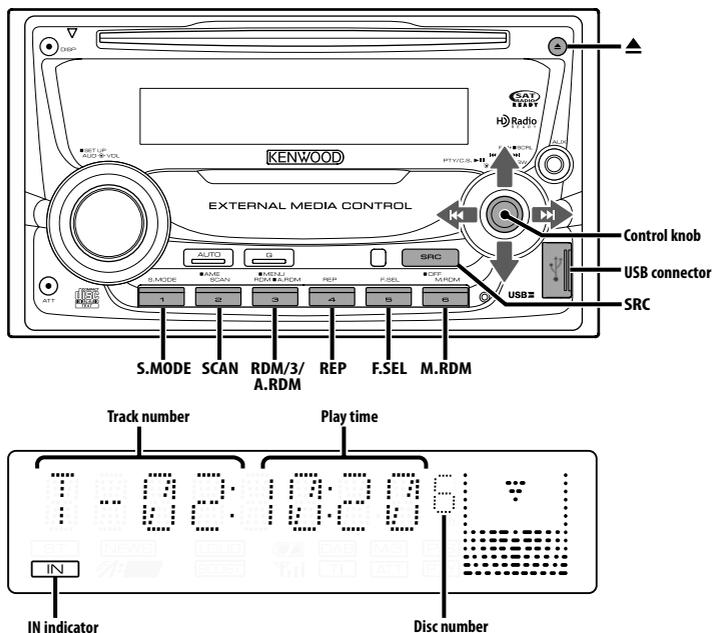
Playing CD & Audio file

When a disc is inserted
Press the [SRC] button.
Select the "CD" display.

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• When a CD is inserted, the "IN" indicator is ON.

Pause and play
Press the Control knob.
Each time you press the knob, the audio pauses or plays.

Eject the CD
Press the [⏏] button.

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• For the audio files and discs you can play with this unit, refer to <About Audio file> (page 5).
• You can play the file made by KENWOOD Music Editor by the same operation.
• You can eject the disc for 10 minutes after switching off the engine.

USB Device Connection

1 Remove the cap and connect the USB cable.
2 Connect the USB device to the unit using the USB cable.
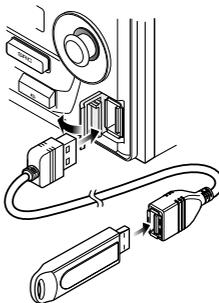
�
• When connecting the USB device, usage of the CA-U1EX (option) is recommended.

Playing USB (iPod) device

When the USB device is not connected

Connect the USB device
Playback of the file contained in the USB device starts.

When the USB device is connected

Select USB source
Press the [SRC] button.
Select the "USB" (or "iPod") display.

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/⁣⁘⁣\

• For the audio files that can be played with this unit and the devices that can be connected to this unit, refer to <About Audio file> (page 5).
• The word "iPod" appearing in this manual indicates the iPod connected with the KCA-iP200 (optional accessory). Refer to <About Audio file> (page 5).
• If you start playback after connecting the iPod, the music that has been played by the iPod is played first.
  In this case, "RESUMING" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
• When the iPod is connected to this unit, "KENWOOD" or "✓" is displayed on the iPod to indicate that you cannot operate the iPod.
• When the USB device is connected to this unit, it can be charged up provided that this unit is powered.
• When the Multi Card Reader is used, refer to <Drive Search> (page 17).
• After you stopped playing a file contained in the USB device, you can restart playing the file from the point where you stopped its playback.
  Even after removing the USB device, you can restart playing the file from the point where you stopped its playback as long as the files contained in the USB device are all the same.
• Be sure to insert the USB device connector as far as it will go.
• You can play the file made by KENWOOD Music Editor by the same operation.

Pause and play
Press the Control knob.
Each time you press the knob, the audio pauses or plays.

Removing the USB device

1 Set the remove mode as the USB source
Press the [⏏] button for at least 2 seconds.
"REMOVE" display blinks.

2 Remove the USB device.

Drive Search

Selecting the device inserted in the Multi Card Reader.

1 Put the playback to pause
Press the [S.MODE] button.

2 Select a device
Push the Control knob towards up or down.

3 Restart playback
Press the [S.MODE] button.

⁣⁣
/⁣⁘⁣\

• This unit is compliant with Multi Card Readers with a maximum of 4 slots.
• If a device is inserted during connection of the Multi Card Reader, it is not recognized. Select the Remove mode with reference to <Playing USB (iPod) device> (page 17), remove the Card Reader, and then insert the memory.

CD/USB device/Audio file/External disc control features

Playing External Disc

Playing discs set in the optional accessory disc player connected to this unit.

Press the [SRC] button.
Select the display for the disc player you want.
Display examples:

Display	Disc player
"CD CH"	CD changer
"MD CH"	MD changer

Pause and play
Press the Control knob.
Each time you press the knob, the audio pauses or plays.

⧼⚞⧽
- Disc 10 is displayed as "0".
- The functions that can be used and the information that can be displayed will differ depending on the external disc players being connected.

Fast Forwarding and Reversing

Fast Forwarding
Hold down toward [►►|] with the Control knob.
Release to resume the playback.

Reversing
Hold down toward [|◄◄] with the Control knob.
Release to resume the playback.

⧼⚞⧽
- There is no sound while the Audio file is being searched.
- The accurate play time is not displayed during fast forwarding or reversing of the Audio file.

Music Search

Switching between music contained in the disc or folder being played now.

Push the Control knob towards [|◄◄] or [►►|].

Function of disc changer/ Audio file
Disc Search/Folder/Album Search

Switching between folders/albums contained in the disc in the disc changer, media, or device being played now.

Push the Control knob towards up or down.

Function of remote control
Direct Music Search

Doing Music Search by entering the music number.

1 Enter the music number
Press the number buttons on the remote control.

⧼⚞⧽
- You can select Direct music Search up to 999.

2 Do music Search
Press the [|◄◄] or [►►|] button.

Cancelling Direct Music Search
Press the [►II] button.

⧼⚞⧽
- This function is not available on iPod and the music edited by "Music Editor".

Function of disc changers with remote control
Direct Disc Search

Doing Disc Search by entering the disc number.

1 Enter the disc number
Press the number buttons on the remote control.

2 Do Disc Search
Press the [+] or [−] button.

Cancelling Direct Disc Search
Press the [►II] button.

⧼⚞⧽
- Input "0" to select disc 10.

Track/File/Disc/Folder Repeat

Replaying the music, disc in the Disc changer or Audio file folder you are listening to.

Press the [REP] button.
Each time you press the button, the Repeat Play alternates between the modes shown in the tables below.

In CD & External disc source

Repeat play	Display
Track Repeat	"TRAC REP"
Disc Repeat (In Disc Changer)	"DISC REP"
OFF	"REP OFF"

In Audio file source

Repeat play	Display
File Repeat	"FILE REP"
Folder Repeat*	"FOLD REP"
OFF	"REP OFF"

⁂
• * This function is not available on iPod and the music edited by "Music Editor".

Scan Play

Playing the first part of each music on the disc or Audio file folder you are listening to and searching for the music you want to hear.

1 Start Scan Play
Press the [SCAN] button.
"TRAC SCN"/"FILE SCN"/"SCAN ON" is displayed.

2 Release it when the music you want to listen to is played
Press the [SCAN] button.

⁂
• This function is not available on iPod and the music edited by "Music Editor".

Random Play

Play all the music on the disc or Audio file folder in random order.

Press the [RDM] button.
Each time you press the button, Random Play turns ON or OFF.
When the Random mode is ON, "DISC RDM"/"FOLD RDM"/"RDM ON" is displayed.

⁂
• When you push the Control knob toward [►►I], the next selected music starts.

Function of disc changer
Magazine Random Play

Play the music on all the discs in the disc changer in random order.

Press the [M.RDM] button.
Each time you press the button, the Magazine Random Play turns ON or OFF.
When the Magazine Random mode is ON, "MGZN RDM" is displayed.

⁂
• When you push the Control knob toward [►►I], the next selected music starts.

CD/USB device/Audio file/External disc control features

Function of Audio file
All Random Play

Playing randomly from all of the Audio files recorded in the media.

Press the [A.RDM] button for at least 1 second.
When the random mode is ON, "ALL RDM" is displayed.

Cancelling the All Random Play
Press the [A.RDM] button.

⊜

• When you push the Control knob toward [▶▶], the next selected music starts.
• This function is not available on iPod and the music edited by "Music Editor".

Function of iPod, "Music Editor" file
File select

Selecting the music you want to listen to from the device or media being played now.

1 Enter File Select mode
Press the [F.SEL] button.
Select the "F-SEL" display.

2 Search for a music
Select the category item using the Control knob.

Operation type	Operation
Movement between items	Push the Control knob towards right or left.
Selection of item	Press the Control knob.
Return to previous item	Push the Control knob for at least 1 second.
Return to first item	Press the [3] button.

Names of all the music are displayed in "SONGS" in the audio file.
Selecting a music will play it from the beginning.

Cancelling File Select
Press the [F.SEL] button.

Function of non-iPod and non-"Music Editor" file
File Select 1 mode

Select the target folder by tracing the hierarchical levels of folders. This is convenient when managing audio files by folder.

1 Enter File Select 1 mode
Press the [F.SEL] button.
Select the "F-SEL1" display.

Folder name display
Displays the current folder name.
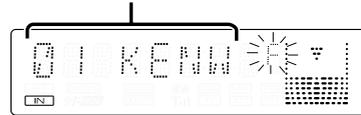
2 Select the folder

Operation type	Operation
Movement between folders	Push the Control knob towards right or left.
Selection of folder	Push the Control knob towards up.
Return to previous folder	Push the Control knob towards down.
Return to root folder	Press the [3] button.

Select the folder containing the music you want to listen to.

3 Determine the folder
Press the Control knob.
The music in the determined folder are displayed.

4 Select the music you want to listen to

Operation type	Operation
Movement between music	Push the Control knob towards right or left.
Return to folder selection step	Press the Control knob for at least 1 second.
Return to root folder	Press the [3] button.

5 Play the selected music
Press the Control knob.

Scrolling the file/folder name display
Push the Control knob toward up for at least 2 seconds.

Cancelling File Select 1
Press the [F.SEL] button twice.

Function of non-iPod and non-"Music Editor" file
File Select 2 mode

Select the target folder within the folders containing audio files. The folder which contains playable audio files is only displayed.

1 Enter File Select 2 mode
Press the [F.SEL] button twice.
Select the "F-SEL2" display.
> Folder name display
> Displays the current folder name.
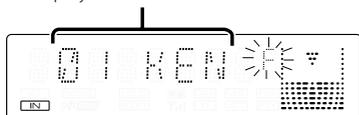
2 Select the folder
Push the Control knob towards right or left.
Each time you push the knob, the folders containing audio files are displayed one after another.

Check the name of upper level folder
Push the Control knob towards up.
Each time you push the knob towards up, the folder just above the current folder is displayed. Each time you push the knob towards down, the folder just below the current folder is displayed.
" ⅙ " is displayed while the upper level folder is displayed.

3 Determine the folder
Press the Control knob.
The music in the determined folder are displayed.

4 Select the music you want to listen to

Operation type	Operation
Movement between music	Push the Control knob towards right or left.
Return to folder selection step	Press the Control knob for at least 1 second.

5 Play the selected music
Press the Control knob.

Scrolling the file/folder name display
Push the Control knob toward up for at least 2 seconds.

Cancelling File Select 2
Press the [F.SEL] button.

Text/Title Scroll

Scrolling the displayed CD text, Audio file text, or MD title.

Push the Control knob toward up for at least 2 seconds.

⏝

• When the <Display Illumination Control> (page 25) is set to OFF, the display may black out while scrolling.

HD Radio control features

Control knob

AUTO/AME

SRC

1 - 6

Band display

Frequency display

ST indicator

Preset station number
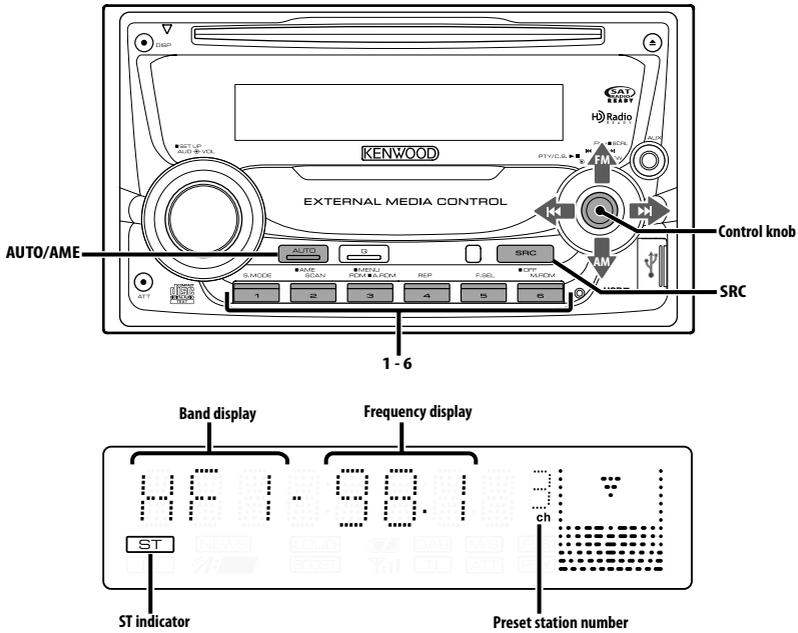
About HD Radio

- When you connect an HD Radio, Tuner features of the unit are disabled and changed to HD Radio tuner features. A portion of the setting methods including the Tuning Mode will change.

- With the HD Radio tuner, you can use the similar functions to <Station Preset Memory>, <Auto Memory Entry>, <Tuning Mode> and <Preset Tuning> of Tuner features. Refer to Tuner features for how to use the functions.

Tuning

Selecting the station.

1 Select HD Radio source
Press the [SRC] button.
Select the "HD RADIO" display.

2 Select the HD FM band
Push the Control knob toward [FM].
Each time you push the knob to [FM], the band alternates between the HF1, HF2, and HF3 bands.

Select the HD AM band
Push the Control knob toward [AM].

3 Tune up or down band
Push the Control knob towards [I◄◄] or [►►I].

Menu system

Control knob

MENU   SRC

Menu display
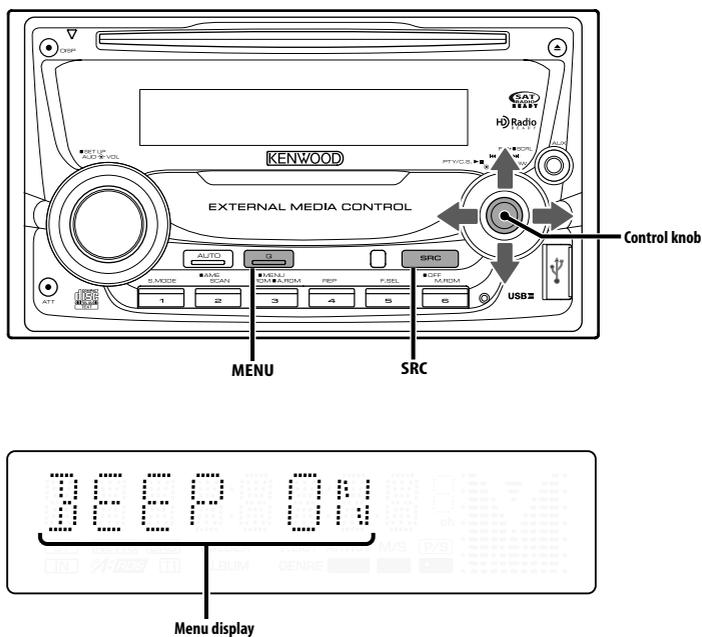
Menu System

Setting beep sound during operation, etc.
functions.
The Menu system basic operation method is
explained here. The reference for the Menu items
and their setting content is after this operation
explanation.

1 Enter Menu mode
Press the [MENU] button for at least 1 second.
"MENU" is displayed.

2 Select the menu item
Push the Control knob towards up or down.
Example: When you want to set the beep sound
select the "BEEP" display.

3 Set the menu item
Push the Control knob towards right or left.
Example: When you select "BEEP", each time you
push the knob it alternates between
"BEEP ON" or "BEEP OFF". Select 1 of them
as the setting.
You can continue by returning to step 2 and
setting other items.

4 Exit Menu mode
Press the [MENU] button.

⊜

• When other items those applicable to the basic
operation method above are displayed, their setting
content chart is entered. (Normally the setting listed at
the top of the chart is the original setting.)
Also, the explanation for items that are not applicable
(<Manual Clock Adjustment> etc.) are entered step by
step.

English | **23**

Menu system

In Standby mode
Activating Security Code

Activating the Security Code disables the usage of audio unit by someone else. Once the Security Code is activated, the entry of authorized Security Code is required to turn on the audio unit when it is removed from the vehicle. Indication of this Security Code activation prevents your precious audio unit from stealing.

⟨✎⟩

• You can set the Security Code with a 4 digit number of your choice.
• The Security Code cannot be displayed or referenced. Make a note of the Security Code and treasure it up.

1 Enter Standby
   Press the [SRC] button.
   Select the "STANDBY" display.

2 Enter Menu mode
   Press the [MENU] button for at least 1 second.
   When "MENU" is displayed, "CODE SET" is also displayed.

3 Enter Security Code mode
   Press the Control knob for at least 1 second.
   When "ENTER" is displayed, "CODE" is also displayed.

4 Select the digits to enter
   Push the Control knob towards right or left.

5 Select the Security Code numbers
   Push the Control knob towards up or down.

6 Repeat step 4 and 5, and complete the Security Code.

7 Confirm the Security Code
   Press the Control knob for at least 3 seconds.
   When "RE-ENTER" is displayed, "CODE" is also displayed.

8 Do the step 4 through 7 operation, and reenter the Security Code.
   "APPROVED" is displayed.
   The Security Code function activates.

⟨✎⟩

• If you enter the wrong Code in steps 4 through 6, repeat from step 4.

9 Exit Security Code mode
   Press the [MENU] button.

Resetting the Security Code function when the audio unit is first used after removed from the battery power source or the Reset button is pressed

1 Turn the power ON.

2 Do the step 4 through 7 operation, and enter the Security Code.
   "APPROVED" is displayed.
   Now, you can use the unit.

⟨✎⟩

• When the Security Code function is activated, "CODE SET" changes to "CODE CLR".
• To deactivate the Security Code function, see the next section <Deactivating Security Code>.

In Standby mode
Deactivating Security Code

To deactivate the Security Code function.

1 Select Security Code mode
   Push the Control knob towards up or down.
   Select the "CODE CLR" display.

2 Enter Security Code mode
   Press the Control knob for at least 1 second.
   When "ENTER" is displayed, "CODE" is also displayed.

3 Select the digits to enter
   Push the Control knob towards right or left.

4 Select the Security Code numbers
   Push the Control knob towards up or down.

5 Repeat step 3 and 4, and complete the Security Code.

6 Press the Control knob for at least 3 seconds.
   "CLEAR" is displayed.
   The Security Code function deactivates.

7 Exit Security Code mode
   Press the [MENU] button.

⟨✎⟩

• If a wrong security code is entered, "ERROR" is displayed. Enter a correct security code.

Touch Sensor Tone

Setting the operation check sound (beep sound)
ON/OFF.

Display	Setting
"BEEP ON"	Beep is heard.
"BEEP OFF"	Beep canceled.

Manual Clock Adjustment

⋯
- You can do this adjustment when the <Synchronize Clock> (page 25) is set as OFF.

1 Select Clock Adjustment mode
Push the Control knob towards up or down.
Select the "CLK ADJ" display.

2 Enter Clock Adjust mode
Press the Control knob for at least 1 second.
The clock display blinks.

3 Adjust the hours
Push the Control knob towards up or down.

Adjust the minutes
Push the Control knob towards right or left.

4 Exit Clock adjustment mode
Press the [MENU] button.

Synchronize Clock

Synchronizing the RDS station time data and this
unit's clock.

Display	Setting
"SYNC OFF"	Adjust the time manually.
"SYNC ON"	Synchronizes the time.

⋯
- It takes 3 to 4 minutes to synchronize the clock.

Display Illumination Control

This function turns off the display when you
perform no operation for 5 seconds. This function is
effective when you are driving at night.

Display	Setting
"DISP ON"	Keeps the display on.
"DISP OFF"	Turns off the display when you perform no operation for 5 seconds.

⋯
- Set the Display Illumination Control when the <Demonstration mode Setting> (page 29) is set to OFF.
- When the display is off, pressing any key will turn on the display.
- When the display is off, you cannot perform any operation except for the following:
  - Volume
  - Attenuator
  - Selecting the source
  - Ejecting the disc
  - Turning off the power
  - USB remove mode
- During function control, such as the Menu System, the display stays on.

Dimmer

Dimming this unit's display automatically when the
vehicle light switch is turned ON.

Display	Setting
"DIM AUTO"	The display dims.
"DIM OFF"	The display doesn't dim.

Switching preout

Alternating the preout between the rear and
subwoofer. (With the subwoofer the sound outputs
without being effected by fader control.)

Display	Setting
"SWPRE R"	Rear preout.
"SWPRE SW"	Subwoofer preout.

Menu system

In Standby mode
Built-in Amp Setting

Controlling the built-in amplifier.
Turning OFF this control enhances the preout quality.

Display	Setting
"AMP ON"	The built-in amplifier activates.
"AMP OFF"	The built-in amplifier deactivates.

*Other than Standby mode/
When the Dual Zone System is ON*
Dual Zone System Setting

Setting the Front channel and Rear channel sound in the Dual Zone System.

Display	Setting
"ZONE2 R"	Sub source (Auxiliary input source) is to be rear channel.
"ZONE2 F"	Sub source (Auxiliary input source) is to be front channel.

In Audio file source
Supreme Setting

When AAC, MP3 or WMA files encoded at a low bit rate (less than 96kbps (fs=44.1k, 48kHz)) are played, this function restores their high frequency region to approach the sound quality of equivalents of these files encoded at a high bit rate. Processing is optimized for the compression format used (AAC, MP3, or WMA), and adjustment is made for the bit rate used.

Display	Setting
"SPRM ON"	Plays sound using the Supreme function.
"SPRM OFF"	Plays the original sound stored in the audio file.

⊜
• The sound effect may be imperceptible depending on the relationship between the audio file format and setting.
• This function is not available on the iPod.

Other than Standby mode
Traffic Information

Switching to traffic information automatically when a traffic bulletin starts even when you aren't listening to the radio.

Display	Setting
"TI OFF"	The Traffic Information function is OFF.
"TI ON"	The Traffic Information function is ON.

When it is ON, the "TI" indicator is ON.
When a traffic information station isn't being received the "TI" indicator blinks.
When a traffic bulletin starts, "TRAFFIC" is displayed it and it switches to traffic information.

⊜
• During reception of an AM station when the Traffic Information function is turned ON, it switches to an FM station.
• During reception of traffic information the adjusted volume is automatically remembered, and the next time it switches to traffic information it's automatically the remembered volume.

Receiving other traffic information stations (In tuner source)
Push the Control knob towards [◄◄] or [►►].
⊜
• You can change the traffic information station when listening to the radio.

In FM reception
CRSC (Clean Reception System Circuit)

Temporarily have reception alternate from stereo to mono to reduce multi-path noise when listening to the FM station.

Display	Setting
"CRSC ON"	The CRSC is ON.
"CRSC OFF"	The CRSC is OFF.

⊜
• Strong electrical fields (such as from power lines) may cause unstable sound quality when CRSC is turned ON. In such a situation, turn it OFF.

Receive mode Setting

Sets the receive mode.

1 Select the Receive mode
Push the Control knob towards up or down.
Select the "HDR MODE" display.

2 Enter Receive mode
Press the Control knob for at least 1 second.

3 Set the Receive mode
Push the Control knob towards up or down.
Each time you push the knob, the Receive mode alternates between the modes shown in the table below.

Receive mode	Display	Operation
Auto mode	"AUTO"	Analog broadcasts and digital broadcasts will be switched automatically. When both are being transmitted, the digital broadcast will have priority.
Digital	"DIGITAL"	Digital broadcasts only.
Analog	"ANALOG"	Analog broadcasts only.

4 Exit Receive mode
Press the [MENU] button.

⁅⁆

• Even if the Receive mode is set to "AUTO", when the Ball game mode program (non-delayed broadcast program) is received, the Receive mode will automatically switch to Analog broadcast only.

Electronic Serial Number (ESN) display

Displaying the Electronic Serial Number.

Display
"ESN = ************"

⁅⁆

• Electronic Serial Number (ESN)
It is important to retain the unit serial number and the electronic Satellite radio Identification number for service activation and potential service changes.

Auxiliary Input Display Setting

Selecting the display when changing to Auxiliary input source.

1 Select Auxiliary input source
Press the [SRC] button.
Select the "AUX"/"AUX EXT" display.

2 Enter Menu mode
Press the [MENU] button for at least 1 second.
"MENU" is displayed.

3 Select Auxiliary input display setting mode
Push the Control knob towards up or down.
Select the "NAME SET" display.

4 Enter Auxiliary input display setting mode
Press the Control knob for at least 1 second.
The presently selected Auxiliary input display is displayed.

5 Select the Auxiliary input display
Push the Control knob towards right or left.
Each time you push the knob, the display alternates as listed below.
• "AUX"/"AUX EXT"
• "DVD"
• "PORTABLE"
• "GAME"
• "VIDEO"
• "TV"

6 Exit Auxiliary input display setting mode
Press the [MENU] button.

⁅⁆

• When operation stops for 10 seconds, the name at that time is registered, and the Auxiliary input display setting mode closes.
• You can only set the Auxiliary input display when the built-in auxiliary input or the auxiliary input of optional KCA-S220A is used.

Text Scroll

Setting the displayed text scroll.

Display	Setting
"SCL AUTO"	Repeats scroll.
"SCL MANU"	Scrolls when the display changes.

⊛

- The text scrolled is listed below.
  - CD text
  - Folder name/ File name/ Music title/ Artist name/ Album name
  - MD title
  - Radio text
  - Text for the Satellite radio source, HD Radio source, including Channel name, etc.

In Standby mode
Built-in Auxiliary input Setting

Set the Built-in Auxiliary Input function.

Display	Setting
"AUX OFF"	When selecting the source there's no Auxiliary Input.
"AUX ON"	When selecting the source there's Auxiliary Input.

In Standby mode
CD Read Setting

When there is a problem with playing a CD with special format, this setting plays the CD by force.

Display	Setting
"CD READ1"	Play CD and Audio file.
"CD READ2"	Play CD by force.

⊛

- Some music CDs may not play even in the "CD READ2" mode.

Other than Standby mode
Audio Preset Memory

Registering the value setup by Sound Control. The memory cannot be erased by the Reset button.

1 Setup Sound Control
Refer to the following operations to setup the Sound Control.
- <Audio Control> (page 8)
- <Audio Setup> (page 9)

2 Enter Menu mode
Press the [MENU] button for at least 1 second.
"MENU" is displayed.

3 Select Audio Preset mode
Push the Control knob towards up or down.
Select the "A-PRESET" display.

4 Enter Audio Preset mode
Press the Control knob for at least 1 second.

5 Select the Audio Preset Memory
Push the Control knob towards up or down.
Select the "MEMORY" display.

6 Put the Audio Preset in the memory
Press the Control knob for at least 2 seconds.
The "MEMORY" display blinks 1 time.

7 Exit Audio Preset mode
Press the [MENU] button.

⊛

- Register 1 pair of Audio Preset Memory. You cannot register by the source.
- When you press the Reset, all the sources will be the setting value which is registered.
- The following items cannot be registered.
  Volume, Balance, Fader, Loudness, Volume offset, Dual Zone System, Rear Volume

Audio Preset Recall

Recalling the sound setup registered by <Audio Preset Memory> (page 28).

1 Select the source
Press the [SRC] button.

2 Enter Menu mode
Press the [MENU] button for at least 1 second.
"MENU" is displayed.

3 Select Audio Preset mode
Push the Control knob towards up or down.
Select the "A-PRESET" display.

4 Enter Audio Preset mode
Press the Control knob for at least 1 second.

5 Select the Audio Preset Recall
Push the Control knob towards up or down.
Select the "RECALL" display.

6 Recall the Audio Preset
Press the Control knob for at least 2 seconds.
The "RECALL" display blinks 1 time.

7 Exit Audio Preset mode
Press the [MENU] button.

⁀

• The User memory of <System Q> (page 8) is changed to the value which was recalled.
• The source tone memory item of <Audio Control> (page 8) is changed to the value which was recalled by the selected source.

Firmware version display

Displaying the firmware version with the unit.

1 Select the firmware version display mode
Push the Control knob towards up or down.
Select the "F/W VER" display.

2 Display the firmware version
Push the Control knob towards right or left.

Demonstration mode Setting

Sets the demonstration mode.

1 Select the Demonstration mode
Push the Control knob towards up or down.
Select the "DEMO" display.

2 Set the Demonstration mode
Press the Control knob for at least 2 seconds.
Each time you press the knob at least 2 seconds, the Demonstration mode alternates between the settings shown in the table below.

Display	Setting
"DEMO ON"	The Demonstration mode function is ON.
"DEMO OFF"	Exit Demonstration mode (Normal mode).

Basic Operations of remote control

VOL —
SRC
ATT
AUD —
►II
FM/AM/+/−
◄◄/►►◄
2-ZONE
DIRECT
[0] — [9]
▼/▲
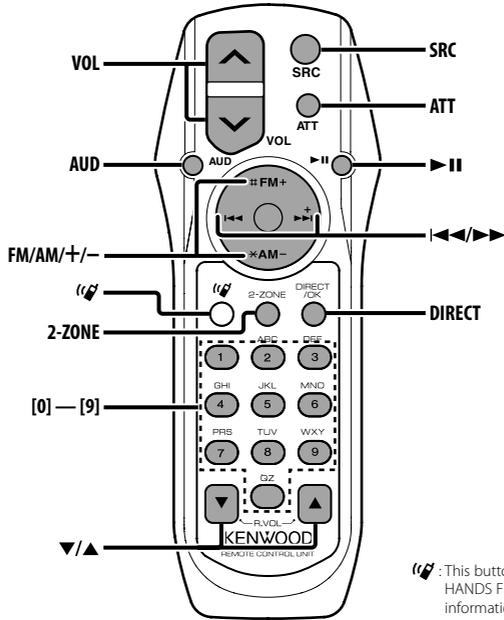
((🔔 : This button is used when Kenwood Bluetooth
HANDS FREE BOX is connected. For more
information, refer to the instruction manual of
Bluetooth HANDS FREE BOX.

Loading and Replacing the battery

Use two "AA"/ "R6"-size batteries.
Slide the cover while pressing downwards to
remove it as illustrated.
Insert the batteries with the + and – poles aligned
properly, following the illustration inside the case.
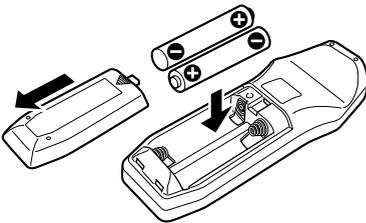
⚠WARNING
• Store unused batteries out of the reach of children.
  Contact a doctor immediately if the battery is
  accidentally swallowed.

⚠
• Do not set the remote control in hot places such as on
  the dashboard.

Basic operations

[VOL] buttons
  Adjusts the volume.

[SRC] button
  Each time you press the button, the source
  alternates.
  For the source alternating order refer to <Selecting
  the Source> (page 7).

[ATT] button
  Turns the volume down quickly.
  When the button is pressed again, the volume
  returns to the previous level.

Audio Control

[AUD] button

Selects the Audio item to be adjusted.

[VOL] buttons

Adjusts the Audio item.

(⟨⟩)

• Refer to <Audio Control> (page 8) for the operation method, such as the procedures for Audio control and others operations.

Dual Zone System

[2-ZONE] button

Each time you press the button, "2ZON" of <Audio Setup> (page 9) is turned ON or OFF.

[▲]/ [▼] buttons

Adjusts the volume of the rear channel.
The rear channel activates while the Dual Zone System is ON.

In Tuner source

[FM]/ [AM] buttons

Selects the band.
Each time you press the [FM] button, the band alternates between the FM1, FM2, and FM3 bands.

[|◄◄]/ [►►|] buttons

Tune up or down band.

[0] — [9] buttons

Press buttons [1] — [6] to recall preset stations.

[DIRECT] button

Enters and cancels the <Direct Access Tuning> (page 13) mode.

[►II] button

Enters and cancels the <PTY (Program Type)> (page 14) mode.

In Disc/USB source

[|◄◄]/ [►►|] buttons

Going forwards and backwards between music.

[+]/ [−] buttons

Going forwards and backwards between disc/ folders.

[►II] button

Each time you press the button, the music is played or paused.

[0] — [9] buttons

When in <Direct Music Search> (page 18) and <Direct Disc Search> (page 18), enters the music/ disc number.

In Satellite radio source

[FM] button

Selects the preset band.

[|◄◄]/ [►►|] buttons

Searches up or down channels.

[0] — [9] buttons

Press buttons [1] — [6] to recall preset channels.

[DIRECT] button

Enters and cancels the <Direct Access Tuning> mode.

In HD Radio source

[FM] button

Selects the HD FM band.
Each time you press the [FM] button, the band alternates between the HF1, HF2, and HF3 bands.

[AM] button

Selects the HD AM band.

[|◄◄]/ [►►|] buttons

Tunes up or down bands.

[0] — [9] buttons

Press buttons [1] — [6] to recall preset stations.

Accessories/ Installation Procedure

Accessories
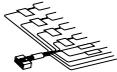
① 1

② 1

③ 1

④ 6

⑤ 6

⑥ 1

⑦ 2

Installation Procedure

1. To prevent a short circuit, remove the key from the ignition and disconnect the ⊖ battery.
2. Make the proper input and output wire connections for each unit.
3. Connect the speaker wires of the wiring harness.
4. Connect the wiring harness wires in the following order: ground, battery, ignition.
5. Connect the wiring harness connector to the unit.
6. Install the unit in your car.
7. Reconnect the ⊖ battery.
8. Press the reset button.

⚠WARNING
If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.

⚠

- If the power is not turned ON ("PROTECT" is displayed), the speaker wire may have a short-circuit or touched the chassis of the vehicle and the protection function may have been activated. Therefore, the speaker wire should be checked.
- If your car's ignition does not have an ACC position, connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, as with battery wires, the battery may die.
- If the console has a lid, make sure to install the unit so that the faceplate will not hit the lid when closing and opening.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires with vinyl tape or other similar material. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you share the ⊖ wires or ground them to any metal part in the car.
- When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the ⊕ connector of the left speaker to a front output terminal, do not connect the ⊖ connector to a rear output terminal.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Mount the unit so that the mounting angle is 30° or less.

If You Want to Connect iPod

KCA-iP200 (Optional accessory)
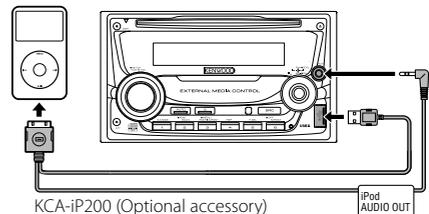
iPod
AUDIO OUT

- No other optional accessory can be connected because the USB connector and the AUX input are used for iPod connection.
- Dual Zone System in <Audio Setup> (page 9) will become unavailable.

Connecting Wires to Terminals

To connect these leads, refer to the relevant instruction manuals.

To Kenwood disc changer/ External optional accessory

Fuse (10A)

FM/AM antenna input

Front left output (White)
Front right output (Red)

Rear left output (White)/ Sub Woofer left output (White)
Rear right output (Red)/ Sub Woofer right output (Red)

Wiring harness (Accessory①)

If no connections are made, do not let the wire come out from the tab.

Power control wire (Blue/White)

P.CONT

When using the optional power amplifier, connect to its power control terminal.

Motor antenna control wire (Blue)

ANT. CONT

Depending on what antenna you are using, connect either to the control terminal of the motor antenna, or to the power terminal for the booster amplifier of the film-type antenna.

TEL mute wire (Brown)

MUTE

Connect to the terminal that is grounded when either the telephone rings or during conversation.

To connect the Kenwood navigation system, consult your navigation manual.

Dimmer control wire (Orange / White)

ILLUMI

To car light control switch

White
White/Black

FRONT L

⊕ To front left
⊖ speaker

Gray
Gray/Black

FRONT R

⊕ To front right
⊖ speaker

Green
Green/Black

REAR L

⊕ To rear left
⊖ speaker

Purple
Purple/Black

REAR R

⊕ To rear right
⊖ speaker

Car fuse box

Ignition key switch

Ignition wire (Red)

ACC

Battery wire (Yellow)

Car fuse box (Main fuse)

Ground wire (Black) ⊖ (To car chassis)

Battery

Installing the Escutcheon

For General Motors

1 Refer to the section <Removing the Hard Rubber Frame>-and then remove the hard rubber frame.

2 Cut out accessory ② to meet the shape of the opening of the center console.

3 Attach accessory ② to the unit.

Cut out to meet the shape of the opening in the vehicle.
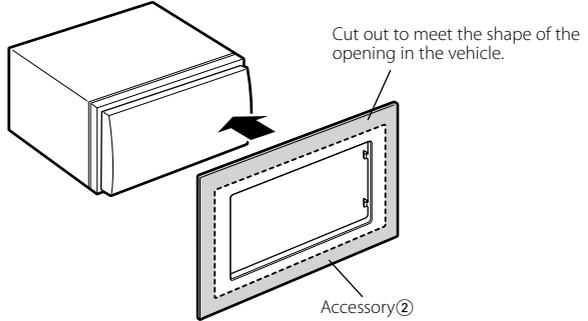
Accessory②

For TOYOTA/ SCION

1 Refer to the section <Removing the Hard Rubber Frame> and then remove the hard rubber frame.

2 Cut out accessory ② as illustrated.

⁅⟲⁆
• When cutting out accessory ②, make sure it fits the opening of the center console.

Cutting line
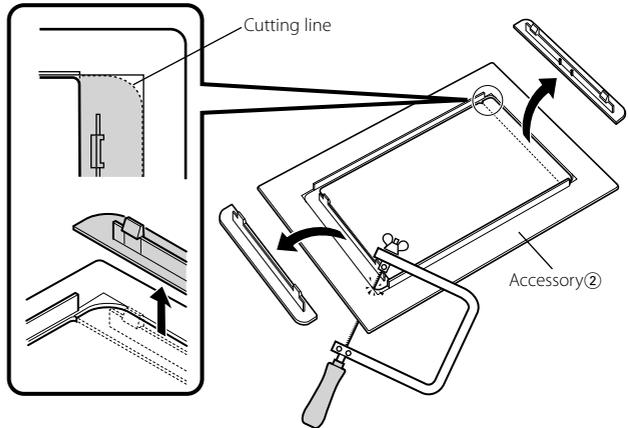
Accessory②

3 Fold double-sided adhesive (accessory ③) along the slit and attach it to accessory ② cut-out against the center rib as illustrated. Use 2 pieces of accessory ③ for 1 accessory ② cut-out.

4 Attach accessory ② cut-out to the unit.

Accessory③
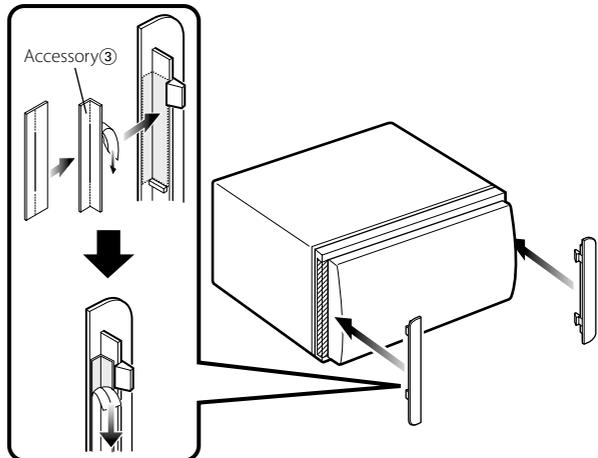
Installation

Installing the Unit

Firewall or metal support

Screw (M4X8)
(commercially available)

Bend the tabs of the mounting
sleeve with a screwdriver or similar
utensil and attach it in place.

Self-tapping screw
(commercially available)

Metal mounting strap
(commercially available)

Accessory⑥
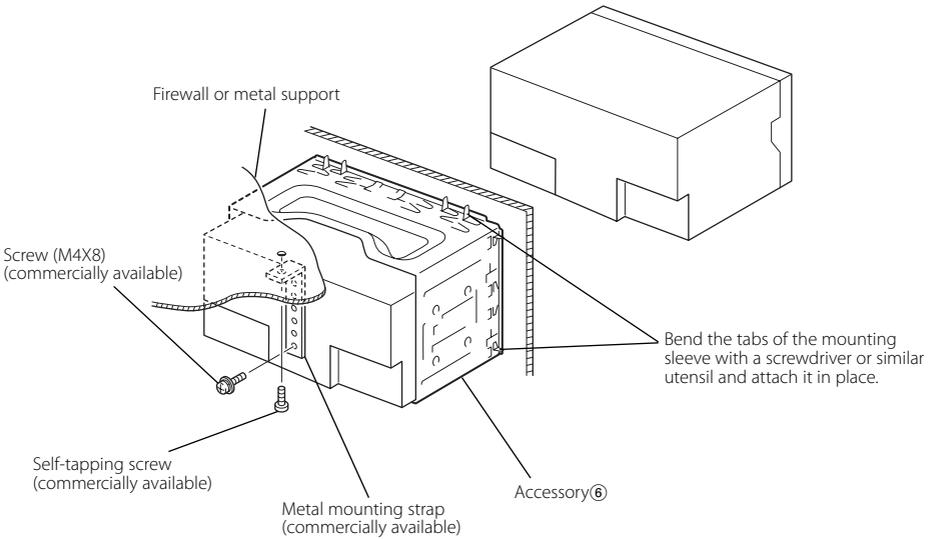
## Installing in Japanese-Made Cars and General Motors Cars

Install onto the car bracket using the supplied screws
(M5 × 6 mm, M5 × 7 mm).
The holes of the car bracket to use will differ
depending on the car model.

Car Bracket

Accessory④ (M5 × 7 mm)
or Accessory⑤(M5 × 6 mm)
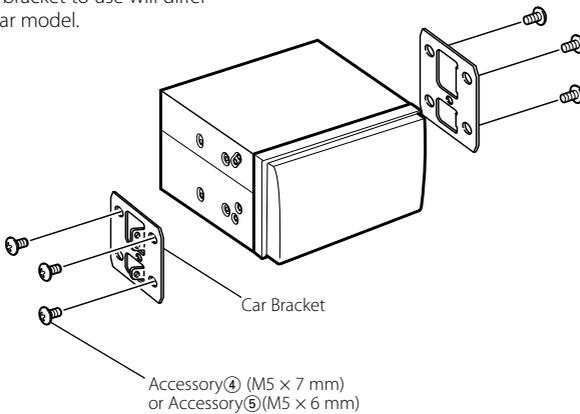
Removing the Unit

Removing the Hard Rubber Frame (escutcheon)

1 Engage the catch pins on the removal tool ⑦ and remove the two locks on the lower level.
Lower the frame and pull it forward as shown in the figure.

Lock   Catch

Accessory⑦
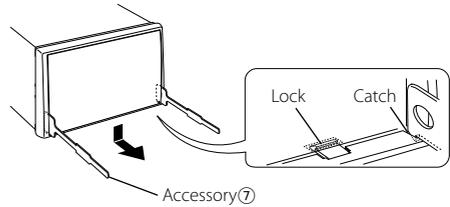
2 When the lower level is removed, remove the upper two locations.

💬
• The frame can be removed from the top side in the same manner.
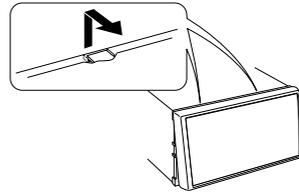
Removing the Unit

1 Refer to the section <Removing the Hard Rubber Frame> and then remove the hard rubber frame.
2 Remove the Hex-head screw with integral washer (M4X8) on the back panel.
3 Insert the two removal tools ⑦ deeply into the slots on each side, as shown.

Accessory⑦
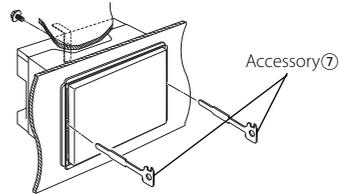
4 Lower the removal tool towards the bottom, and pull out the unit halfway while pressing towards the inside.

⚠
• Be careful to avoid injury from the catch pins on the removal tool.
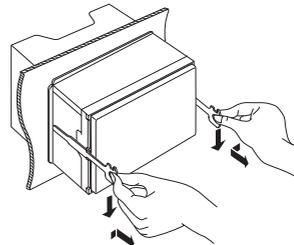
5 Pull the unit all the way out with your hands, carefully not to drop it.
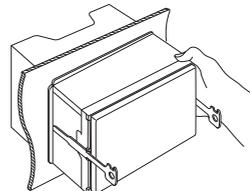
Troubleshooting Guide

Some functions of this unit may be disabled by some settings made on this unit.

⚠ Cannot switch to Aux source.
▶ • AUX is not turned on. ☞ <Built-in Auxiliary input Setting> (page 28)
 • AUX cannot be used when the KCA-iP200 is connected.

⚠ • Cannot set up the subwoofer.
 • Cannot set up subwoofer phase.
 • No output from the subwoofer.
 • Cannot set up the low pass filter.
▶ • Preout is not set to subwoofer. ☞ <Switching preout> (page 25)
 • <Subwoofer Output> (page 9) is not set to On.
 • The Dual zone function is enabled. ☞ <Audio Setup> (page 9)

⚠ • Cannot set up the high pass filter.
 • Cannot set up the Fader.
▶ The Dual zone function is enabled. ☞ <Audio Setup> (page 9)

⚠ Cannot set up the subwoofer phase.
▶ Low pass filter is set to Through. ☞ <Audio Setup> (page 9)

⚠ • Cannot select the output destination of the subsource in the Dual zone.
 • Cannot adjust the volume of the rear speakers.
▶ The Dual zone function is disabled. ☞ <Audio Setup> (page 9)

⚠ No Audio control effect on AUX.
▶ The Dual zone function is enabled. ☞ <Audio Setup> (page 9)

⚠ • Cannot register a security code.
 • Cannot set up Display Illumination Control.
▶ <Demonstration mode Setting> (page 29) is not turned off.

⚠ Cannot play audio files.
▶ <CD Read Setting> (page 28) is set to "2".

⚠ Cannot File select.
▶ The Random play function is enabled.

⚠ • The Traffic Information setting is ineffective.
 • The Synchronize Clock setting is ineffective.
▶ HD Radio is in use.

What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

General

❓ The Touch Sensor Tone doesn't sound.
✔ The preout jack is being used.
 ☞ The Touch Sensor Tone can't be output from the preout jack.

Tuner source

❓ Radio reception is poor.
✔ The car antenna is not extended.
 ☞ Pull the antenna out all the way.
✔ The antenna control wire is not connected.
 ☞ Connect the wire correctly, referring to the section on <Connecting Wires to Terminals> (page 33).

Disc source

❓ The specified disc does not play, but another one plays instead.
✔ The specified CD is quite dirty.
 ☞ Clean the CD.
✔ The disc is loaded in a different slot from that specified.
 ☞ Eject the disc magazine and check the number for the specified disc.
✔ The disc is severely scratched.
 ☞ Try another disc instead.

Audio file source

❓ The sound skips when an Audio file is being played.
✔ The media is scratched or dirty.
 ☞ Clean the media, referring to the CD cleaning of the section on <Handling CDs> (page 6).
✔ The audio file is broken or not supported.
 ☞ Damaged and unsupported files are skipped.
✔ The recording condition is bad.
 ☞ Record the media again or use another media.

Troubleshooting Guide

HD Radio source

❓ No sound can be heard, or the volume is low.
 ✔ The preset broadcast station is not transmitting in the mode that was set with <Receive mode Setting> (page 27).
  ☞ Please set <Receive mode Setting> to "AUTO".
 ✔ In digital AM broadcasting, receive mode switches between stereo and monaural too often.
  ☞ Receiving condition is bad or unstable. Stereo is chosen when receiving condition is good, and it switches to monaural when the condition becomes bad.
 ✔ HD Radio tuner is connected to KCA-S220A or other units.
  ☞ Connect the HD Radio tuner directly to this unit.

USB device source

❓ The USB device is not detected.
 ✔ The USB connector is disconnected.
  ☞ Connect the connector of the USB device properly.

❓ The USB device does not play its audio files.
 ✔ The USB connector is disconnected.
  ☞ Connect the connector of the USB device properly.

The messages shown below display your systems condition.

EJECT: • No disc magazine has been loaded in the changer. The disc magazine is not completely loaded.
• No CD in the unit.

NO DISC: No disc has been loaded in the disc magazine.

TOC ERR: • No disc has been loaded in the disc magazine.
• The CD is quite dirty. The CD is upside-down. The CD is scratched a lot.

READ ERR: • The number of files or folders which are stored in the connected USB device is above the limitation.
• The file system of the connected USB device is broken.
⇨ Copy the files and folders for the USB device again referring to http://www.kenwood.com/usb/. If the error message is still displayed, initialize the USB device or use other USB devices.

E-05: The disc is unreadable.

BLANK: Nothing has been recorded on the MD.

NO TRACK: No tracks are recorded on the MD, although it has a title.

NO PANEL: The faceplate of the slave unit being connected to this unit has been removed.

E-77: The unit is malfunctioning for some reason.
⇨ Press the reset button on the unit. If the "E-77" code does not disappear, consult your nearest service center.

E-99: Something is wrong with the disc magazine. Or the unit is malfunctioning for some reason.
⇨ Check the disc magazine. And then press the reset button on the unit. If the "E-99" code does not disappear, consult your nearest service center.

LOAD: Discs are being exchanged in the Disc changer.

READING: The unit is reading the data on the disc.

HOLD: The protective circuit in the unit activates when the temperature inside the automatic disc changer exceeds 60℃ (140°F), stopping all operation.
⇨ Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60℃ (140°F), the disc will start playing again.

IN (Blink): The CD player section is not operating properly.
⇨ Reinsert the CD. If the CD cannot be ejected or the display continues to flash even when the CD has been properly reinserted, please switch off the power and consult your nearest service center.

PROTECT: The speaker wire has a short-circuit or touches the chassis of the vehicle, and then the protection function is activated.
⇨ Wire or insulate the speaker cable properly and press the reset button. If the "PROTECT" code does not disappear, consult your nearest service center.

NA FILE: An Audio file is played with a format that this unit can't support.
⇨ ----

COPY PRO: A copy-protected file is played.
⇨ ----

DEMO: The Demonstration mode has been selected.
⇨ The <Demonstration mode Setting> (page 29) is ON. Turn it OFF.

NO DVICE: The USB device is selected as a source although no USB device is connected.
⇨ Change the source to any source other than USB. Connect an USB device, and change the source to USB again.

NA DVICE: An unsupported USB device is connected.
⇨ For the supported USB devices, refer to <http://www.kenwood.com/usb/>.

NO MUSIC/E-15: • The connected USB device contains no playable audio file.
• Media was played that doesn't have data recorded that the unit can play.

USB ERR: The connected USB device is rated a current capacity higher than the allowable limit.
⇨ Check the USB device with reference to <http://www.kenwood.com/usb/>.
Some trouble may have occurred to the connected USB device.
⇨ Change the source to any source other than USB. Remove the USB device.

iPod ERR: Connection to the iPod has failed.
⇨ Remove the USB device and then reconnect it.
⇨ Confirm that the software for the iPod is the latest version.

REMOVE: The Remove mode has been selected for the USB device. You can remove the USB device safely.

Specifications

Specifications subject to change without notice.

FM tuner section

Frequency range (200 kHz space)
  : 87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB)
  : 9.3dBf (0.8 µV /75 Ω)
Quieting Sensitivity (S/N = 50dB)
  : 15.2dBf (1.6 µV /75 Ω)
Frequency response (±3.0 dB)
  : 30 Hz – 15 kHz
Signal to Noise ratio (MONO)
  : 70 dB
Selectivity (±400 kHz)
  : ≥ 80 dB
Stereo separation (1 kHz)
  : 40 dB

AM tuner section

Frequency range (10 kHz space)
  : 530 kHz – 1700 kHz
Usable sensitivity (S/N = 20dB)
  : 28 dBµ (25 µV)

CD player section

Laser diode
  : GaAlAs
Digital filter (D/A)
  : 8 Times Over Sampling
D/A Converter
  : 1 Bit
Spindle speed
  : 1000 – 400 rpm (CLV 2times)
Wow & Flutter
  : Below Measurable Limit
Frequency response (±1 dB)
  : 10 Hz – 20 kHz
Total harmonic distortion (1 kHz)
  : 0.008 %
Signal to Noise ratio (1 kHz)
  : 105 dB
Dynamic range
  : 93 dB
MP3 decode
  : Compliant with MPEG-1/2 Audio Layer-3
WMA decode
  : Compliant with Windows Media Audio
AAC decode
  : AAC-LC ".m4a" files
WAV signal
  : Linear-PCM

Audio section

Maximum output power
  : 50 W x 4
Full Bandwidth Power (at less than 1% THD)
  : 22 W x 4
Speaker impedance
  : 4 - 8 Ω
Tone action
  Bass : 100 Hz ±8 dB
  Middle : 1 kHz ±8 dB
  Treble : 10 kHz ±8 dB
Preout level / Load (during disc play)
  : 2500 mV/10 kΩ
Preout impedance
  : ≤ 600 Ω

USB Interface

USB Standard
  : USB 1.1/ 2.0
File System
  : FAT16/ 32
Maximum Supply current
  : 500 mA
MP3 decode
  : Compliant with MPEG-1/2 Audio Layer-3
WMA decode
  : Compliant with Windows Media Audio
AAC decode
  : AAC-LC ".m4a" files
WAV signal
  : Linear-PCM

Auxiliary input

Frequency response (±1 dB)
  : 20 Hz – 20 kHz
Input Maximum Voltage
  : 1200 mV
Input Impedance
  : 100 kΩ

General

Operating voltage (11 – 16V allowable)
  : 14.4 V
Current consumption
  : 10 A
Installation Size (W x H x D)
  : 182 x 112 x 160 mm
    7-3/16 x 4-7/16 x 6-5/16 inch
Weight
  : 3.53 lbs (1.60 kg)